



1948 • 2018

LEONARDO HELICOPTERS e-LEARNING AREA



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Contacts

For any further information, please contact your Training Point of Contact:
Get it from the mobile App "AW TeamUP".



LEONARDO HELICOPTERS e-LEARNING AREA

New e-Learning Area

Leonardo Helicopter believes that learning is not only for the classroom or just a one-time event.

We trust in e-Learning and Blended Learning.

This is the reason why “Leonardo Helicopter Training Academy Portal” enhances the range of training e-Learning courses available to its Customers through the “e-Learning area section of the Portal”.

This approach aims at reaching those who would not travel to be trained due to logistic, time, or budget constraints, and permits **significant savings for our Customers**.

The e-Learning Area is adapted for any desktop and portable devices, and can be reached by using any web browser or the “AW Training” App.

Students can take advantage of e-Learning training **24 hours a day, 7 days a week**.

Instructor support is also available depending on the selected training course.

The e-Learning course portfolio encompasses a wide range of training courses, from ab-initio aeronautical concepts to Type Training subjects, including optional equipment and helicopter features.

For those Students enrolled into a Type Training course, completing the applicable e-Learning Type Training modules prior to entering the classroom provides them with a sound understanding of the basic information.

This enables the time spent in the classroom to be focused on the more advanced subjects, thereby maximizing the benefits of the direct interaction with the instructors and the usage of advanced training aids.

Additionally, through the Training Academy Portal students can:

- access the course reference material
- find the contacts of all course participants
- obtain logistic information about the Training Academy
- gather other useful information about the local area (hotels, attractions, places of interest, transportation, etc.)

e-Courses Structure, Tracking and e-Certificate

Based on a **Training Needs Analysis**, the LH **e-Courses** are structured by topics that build up a complete **learning path**. Once the students complete a topic the coming next will be available.

The students are also able to track their progress within the courses.

Once all the lesson are completed, in order to complete the **e-Course** an **e-Assessment** will test the students' knowledge.

Based on the result of the **e-Assessment** a **Leonardo Helicopters e-Certificate** will be issued.

AW Training Mobile App

Leonardo Helicopters knows that our Students live increasingly mobile, digitally connected lives.

We've responded by providing anytime, anywhere access through the interactive mobile App

“AW Training”.

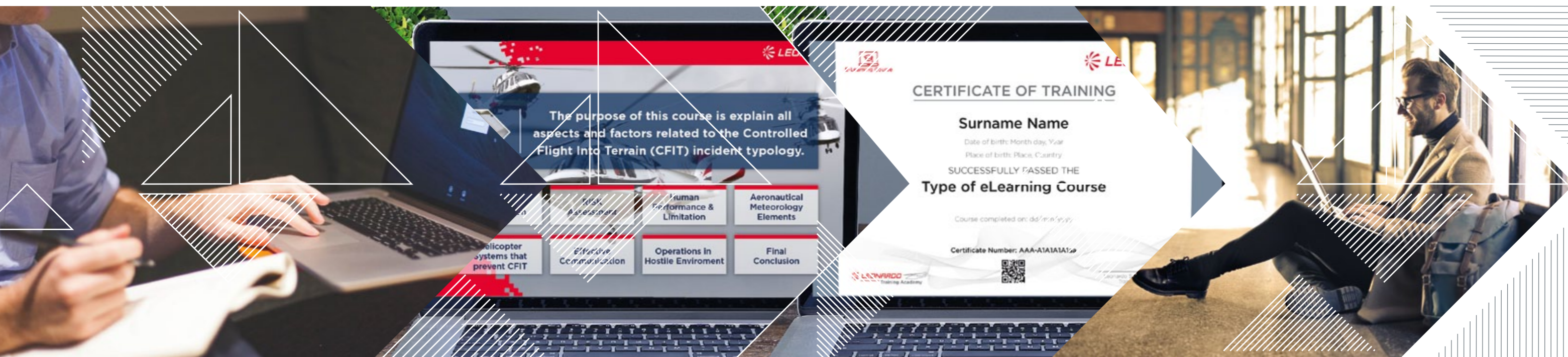
In fact, the students can perform e-Learning courses by means a web browser (PC or MAC), at the URL <https://academy.agustawestland.com> or through the App “AW Training” available on iOS and Android devices (both smartphone and tablet).

Mobile learning happens in **micro-moments** as lessons can be interrupted when using AW Training App.

Some of the features offered by “AW Training” App are:

- Browse the content of the courses, even when offline
- Track progress, mark tasks as complete and browse the learning plans
- Attempt quizzes, post in forums and edit wiki pages
- View the courses grades

DOWNLOAD THE APP TODAY



LIST OF AVAILABLE e-LEARNING COURSES



Controlled Flight Into Terrain (CFIT)

AW139 SAR Mode

AW139 Full Ice Protection System (FIPS)

AW139 Passenger Briefing

AW139 Helicopter Terrain Awareness and Warning System

AW139 Primus EPIC® Phase 7

AW169 HTAWS - SVS

AW169 Cabin Management System e-Learning Briefing

AW189 Fire Safety Information

AW189 RFM Charts (Limitations and Performances)

AW189 Passenger Briefing

AW189 Phase 4 Software Update

AW189-AW169 HUMS

Interactive Electronic Technical Publications (IETP)



Visit the following web page in order to be updated on the latest e-Learning courses available.

https://academy.agustawestland.com/local/staticpage/view.php?page=AW_eLearningArea

CONTROLLED FLIGHT INTO TERRAIN (CFIT) e-LEARNING COURSE



Course Objectives

The aim of the course is to discuss a particular type of aeronautical accident/incident known as Controlled Flight Into Terrain (CFIT), describing the safety methodologies and measures we can put in place to reduce this kind of event.

The main objectives are:

- to improve the knowledge and attention about this incident typology, and
- to show the best tool to assess the risk of each aeronautical operations in order to better evaluate the GO/NOGO decision.

Course Contents

Starting from the acronym definition, the CFIT will be dimensioned in terms of frequencies of events and their consequences thanking advance of the data collected in the most important aeronautical incident databases (FAA/EASA).

The most frequent causes are analyzed, the best barriers against them are discussed and some helicopter systems especially helpful against the CFIT are described.

Finally all the chapters are quickly resumed and some safety recommendations are provided.

e-Learning Course Data

Target Population: Flight Crew members (pilots and cabin crew), Technicians, HEMS Operators' employees, Aviation and First Aid Specialists in general which are involved in HEMS operations.

Regulatory Requirement: Non-specific

Duration: 12 hours

Progress/ Final Test: Yes test required. At the end of the course you will obtain a "Leonardo Helicopters eCertificate"

Course Delivery Method: self-paced eLearning training; Interactive; Multimedia

Course Access: Leonardo Helicopters Training Academy Portal - eLearning Area; AW Training App

Access Availability: Unlimited - 24/7

Access Expiration: No less than 1 year

Device Compatibility: Desktop, Tablet, Smartphone

OS Compatibility: Windows, iOS, Android

Offline Availability: Yes (through AW Training App)





AW139 SAR MODE

e-LEARNING BRIEFING



Briefing Objectives

At the end of this briefing you will have gained a complete understanding of the AFCS SAR Modes and FMS SAR patterns for the AW139 helicopter.

Briefing Contents

AFCS SAR Modes, as FMS SAR patterns, of the AW139 helicopter are integrated in the most complete development of the 4 axis Flight Director. This configuration, as optional equipment, is available with the phases 5,6 or 7 of the Honeywell Primus EPIC®. We are focusing there on the issue for the phase 7.

The 4 axis Enhanced Flight Direct with SAR Modes has been developed in order to make easier and more safe the SAR missions by decreasing the workload of the crew. Then basically, the SAR Modes are intended to enter into Hover mode, automatically and safely, starting from various situations.

Through this briefing, we are going to see how to operate the SAR modes, what are the limitations and the process of each modes. Because to operate safely, it's crucial to understand what you can expect to be done when you decide to engage a SAR mode.

This briefing covers the following topics:

- Overview of FD SAR modes
- Detailed explanations of the operation of each SAR mode, Controls and indications in the cockpit
- Operation of the FMS SAR Patterns, controls and indications
- Safety Fly Up function

e-Learning Briefing Data

Target Population: AW139 aircrews, AW139 avionics technicians, AW139 managers

Regulatory Requirement: Non-specific

Duration: 3 hours

Progress/ Final Test: Yes test required

AW TRAINING



AW139 FULL ICE PROTECTION SYSTEM

e-LEARNING BRIEFING



Course Objectives

At the end of this course you will have become familiar with the architecture and the operation of the Full Ice Protection System that can be installed as an optional kit on the AW139 Helicopters.

Course Contents

Different types of ice may form on the aircraft depending on the flying conditions; although rare, ice formation may have serious effects on aircraft performance. Pilots must use normal operational planning and techniques to avoid flight in these conditions.

The AW139 Helicopter may install the Full Ice Protection System (FIPS) kit that provides fully redundant ice detection, de-icing of the Main Rotor blades, anti-icing for the Tail Rotor blades, and Windshield heating.

The course content covers the following topics:

- FIPS description
- FIPS operation
- Abstract from RFM including operational limitation

e-Learning Course Data

Target Population: AW139 Type Rated Pilots and Engineers

Regulatory Requirement: Non-specific; could be beneficial for specific Training programs

Duration: 3 hours

Progress/ Final Test: None

AW139 PASSENGER BRIEFING

e-LEARNING BRIEFING



Course Objectives

At the end of the course you will know how to:

- safely approach the AW139 helicopter as a passenger
- prepare yourself for a safe flight
- board and disembark

Through the course you will gain a sound knowledge about the AW139 safety devices and procedures.

Course Contents

All passengers, while boarding or disembarking, and during flight must adopt safety behavior to avoid incidents. This cannot be done without knowing:

- the dangerous areas around the helicopter
- configuration of the doors and their usage
- cabin layout and position of the emergency life jacket
- description of the emergency exits and how to operate them during an evacuation procedure

e-Learning Course Data

Target Population: ground and flight crew; passengers

Regulatory Requirement: Non-specific

Duration: 1 hour

Progress/ Final Test: None



AW139



Briefing Objectives

At the end of this briefing you will have gained a complete understanding of the Helicopter Terrain Awareness and Warning System, HTAWS, for the AW139 helicopter.

Briefing Contents

The HTAWS, called Enhanced Ground Proximity Warning System, EGPWS, by Honeywell, is an optional equipment of the AW139, available with the phases 5,6 or 7 of the Honeywell Primus EPIC®. We are focusing there on the issue for the phase 7.

Since the beginning of the aviation story, the Controlled Flight Into Terrain (CFIT) is one of the major source of the fatal accident. That's why, in 1974, the Ground Proximity Warning System is a mandatory equipment on large commercial aircraft. Along this last years, the system has been developed, becoming an Enhanced Ground Proximity Warning System (displaying the terrain and obstacles, with a "look ahead" function), and in the meantime, the system has been adapted to the helicopter operations.

Through this briefing, we are going to see how the system is operating, what are the visual and aural alerts and the processes that generate the alerts in different configurations of flight. Even if the system operates autonomously, it's essential to understand without doubts the meaning of the different alerts and terrain images, what can do, or what cannot do, the HTAWS. In order to increase your situational awareness and keep you safe

This briefing covers the following topics:

- The Functions of EGPWS.
- Terrain and Obstacle Database.
- System Operation.
- Limitations
- Aircrew Actions

e-Learning Briefing Data

Target Population: AW139 aircrews, AW139 avionics technicians, AW139 managers.

Regulatory Requirement: Non-specific

Duration: 2 hours

Progress/ Final Test:Yes test required.



Briefing Objectives

At the end of this briefing you will have gained a general understanding of the new features provided by Primus EPIC® Phase 7 and of the associated documentation for the AW139 helicopter.

Briefing Contents

Honeywell Primus EPIC® is the integrated avionics system of the AW139 helicopter based on modular computers to provide pilots with navigation, communication, aircraft system monitoring, crew alerting, and auto-flight functions, in addition to driving and management of the integrated display system.

Improvements in aircraft and system performances, as well as the increase of its capabilities and of the available features, are made available through upgrades named "Phases", the latest of which is Phase 7.

This briefing introduces the new features brought in by Phase 7 by covering the following topics:

- Honeywell Primus EPIC® Phases
- RFM and QRH Supplements applicable to Phase 7
- General description of the new features provided by Phase 7
- Documentation available for AW139 Honeywell Primus EPIC® Phase 7

e-Learning Course Data

Target Population: AW139 aircrews, avionics technicians, and managers already acknowledge with Phase 4 and 5.

Regulatory Requirement: Non-specific

Duration: 1.5 hours

Progress/ Final Test: None





Briefing Objectives

At the end of this briefing you will have gained a general understanding of HTAWS - SVS and of the associated documentation for the AW169 helicopter.

Briefing Contents

Controlled Flight Into Terrain (CFIT) accidents occur because pilot' situation awareness is lost. The Helicopter Terrain Awareness and Warning System (HTAWS) and Synthetic Vision System display the aircraft position relative to the surrounding terrain and known obstacles, minimizing the risk of CFIT. They provide a combination of visual annunciations, aural alerts and aural warnings.

The course content covers the following topics:

- HTAWS introduction and definition
- AW169 HTAWS
- FLTA Operation
- GPWS Operation Modes
- SVS introduction and Definition
- SVS Controls and Indication

e-Learning Briefing Data

Target Population: AW169 aircrews, AW169 avionics technicians, AW169 managers

Regulatory Requirement: Non-specific

Duration: 2 hours

Progress/ Final Test: Yes test required



Course Objectives

At the end of this briefing you will have gained a general understanding of the new features provided for full-featured in-flight entertainment system, designed for cabin use and of the associated documentation for the AW169 helicopter.

Course Contents

This CMS control unit combines Custom Control Concepts' s latest technologies with existing solid designs -all compacted into one box - for entertainment and cabin management on AW169 helicopters. The CMS SkyOne houses a sub-system within one unit, incorporating most functions necessary in a typical cabin management system. The total control of CMS system is possible of touch screen tablet with an iOS 7 operative system and the iPlanTM software installed. Is possible downloading a free copy of software from the Apple App Store.

This briefing introduces the features brought in by CMS SkyOne by covering the following topics:

- Introduction
- How to start CMS
- Intercom function
- Cockpit Call function
- Ipad - Satcom Call
- Ipad - Light Preset Mode
- Ipad - Light Colours and Intensity
- Ipad - Air Conditioning
- Ipad - Maps Show and Cruise Information
- Ipad - Media Player
- Ipad - Cockpit Separation Windows (LIMO Window)
- Windows Transparency function

e-Learning Course Data

Target Population: AW169 aircrews, AW169 avionics technicians, AW169 managers

Regulatory Requirement: Non-specific

Duration: 0.5h training (8 min video length)

Progress/ Final Test: None



AW189 FIRE SAFETY INFORMATION e-LEARNING COURSE



Course Objectives

At the end of the course you will know how to:

- Recognize helicopter dimension and fuselage materials
- Locate the pitot probes and the fuel tanks;
- Identify the rotor brake control and engage it
- Locate the emergency floatation bags.
- Locate the AW189 power plant
- Shut down the main engines in normal mode, in emergency mode and in case of fire
- Safely approach the AW189 helicopter and disconnecting the main battery;
- Safely unlocking the pilot and co-pilot seat to support the crew leaving the helicopter;
- Safely remove the cabin emergency windows from outside and inside to help the passengers leaving the helicopter.

Course Contents

Firefighting teams providing assistance to the helicopter in the event of a fire on the ground must adopt safety behaviors aimed at reducing the risks for the crew of the helicopter and for themselves. This cannot be done without knowing:

- Airframe structure materials
- configuration of the fuel system
- rotor brake system and operation in order to stop the rotor speed
- description of the emergency floatation bags
- the power plant of the helicopter
- the procedure how to shut down the engines in normal mode and in emergency mode
- the location of the main battery and how to disconnect it from the electrical system
- the procedure how to remove the cabin emergency windows from inside and outside

e-Learning Course Data

Target Population: Ground firefighting team

Regulatory Requirement: Non-specific

Duration: 2.0 hours

Progress/ Final Test: None





Course Objectives

At the end of the course you will have improved your knowledge and skills in reading and computing AW189 RFM Charts (Limitations and Performances)

Course Contents

For all pilots taking the right decision during a flight is often vital: a sound knowledge and a prompt ability in computing the limitations and the performance data permits pilots to stay safe while optimizing their helicopter capabilities.

The Rotorcraft Flight Manual contains all the applicable graphs, tables and diagrams that permit pilots to determine the helicopter limitations and performances for any scenario. This course focuses on the practical use of those charts for the AW189 Type, with special emphasis on the most complex ones.

This course provides students with practical examples and a guidance on the most effective way to determine the required data from the charts.

The course content covers the following AW189 RFM sections:

- Section 1: Limitations
- Section 4: Performance Data (including Category A Clear Area Performance Data)
- Section 9: Supplemental Performance Information

e-Learning Course Data

Target Population: AW189 Type Rated Pilots; qualified Flight Dispatchers and SMS Specialists

Regulatory Requirement: Non-specific; could be beneficial for Recurrent Training programs

Duration: 3 hours

Progress/ Final Test: None



Course Objectives

At the end of the course you will know how to:

- safely approach the AW189 helicopter as a passenger
- prepare yourself for a safe flight
- board and disembark

Course Contents

All passengers, while boarding or disembarking, and during flight must adopt safety behavior to avoid incidents. This cannot be done without knowing:

- the dangerous areas around the helicopter
- configuration of the doors and their usage
- cabin layout and position of the emergency life jacket
- description of the emergency exits and how to operate them during an evacuation procedure

e-Learning Course Data

Target Population: ground and flight crew; passengers

Regulatory Requirement: Non-specific

Duration: 1 hour

Progress/ Final Test: None



AW189 PHASE 4 SOFTWARE UPDATE

e-LEARNING BRIEFING



Briefing Objectives

At the end of this briefing you will have gained a general understanding of the new features provided by the software Phase 4 and of the associated documentation for the AW189 helicopter.

Briefing Contents

The Aircraft and Mission Management System (AMMS) installed in the AW189 integrates and manages navigation, communication, aircraft system interfacing and monitoring, crew alerting, auto-flight, digital map, HUMS, and data upload/download functions, in addition to driving and managing the cockpit displays. Improvements in aircraft and system performances, as well as the increase of its capabilities and of the available features, are made available through upgrades named "Phases", the latest of which is Phase 4.

This briefing introduces the features brought in by the Software Phase 4 by covering the following topics:

- Publications (RFM and QRH)
- Flight Management System (FMS)
- Cockpit Display System (CDS)
- Vehicle Monitoring System (VMS)
- Enhanced Control Display Units - ECDU
- Communication System
- Automatic Flight Control System (AFCS)

e-Learning Course Data

Target Population: AW189 aircrews, AW189 avionics technicians, AW189 managers

Regulatory Requirement: Non-specific

Duration: 1.0 hours

Progress/ Final Test: None

AW189-AW169 HUMS

e-LEARNING



Course Objectives

At the end of the course you will have improved your knowledge on the theory of operation of the Health and Usage Monitoring System (HUMS) for AW189/AW169 Leonardo helicopters.

Course Contents

HUMS is a Key system in today's helicopter maintenance operations, used to determine the actual status and predict impending failures of the monitored critical components. Rotors, Transmissions, and Airframe are the typical helicopter areas monitored by HUMS which gathers data from specific sensors and permits accurate vibration analysis of their components. Evolution in time of the recorded vibration data values allows the calculation of the Health and Usage parameters which have a direct correlation with component impending failures, hence give straight indication for on-condition preventative maintenance. The course recalls the principles of vibration analysis and provides the fundamental characteristics of the AW189/AW169 HUMS: purpose, architecture, components and operation.

The course content covers the following topics:

- HUMS introduction and purpose
- Principles of HUMS vibration analysis
- AW189/AW169 HUMS architecture
- AW189/AW169 HUMS components
- AW189/AW169 HUMS controls and indicators
- Use of HUMS for Rotor Track and Balance

e-Learning Course Data

Target Population: HUMS Specialists; Maintenance Engineers

Regulatory Requirement: Non-specific; recommended for maintenance personnel approaching to HUMS; could be beneficial for Initial/Recurrent Training programs

Duration: 12 hours

Progress/ Final Test: Progress test embedded in the D/L; No final test



AW189

Course Objectives

At the end of this course you will have become familiar with the architecture and the features offered by the Leonardo Helicopters Interactive Electronic Technical Publications (IETP).

Course Contents

The Interactive Electronic Technical Publications (IETP) allow the Customer to consult the latest version of the maintenance publications related to Leonardo helicopters. Interactive Electronic Technical Publications (IETP) may contain, depending on the helicopter model, the Aircraft Maintenance Manual, the Illustrated Parts Catalogue, the Wiring Diagram, the Structural Repair Manual, the Overhaul Manual ect. The course content covers the following topics:

- What is the IETP
- Which is the purpose of the IETP
- How the IETP is structured
- How to identify a connector pin part number
- AW189/AW169 HUMS controls and indicators
- Which are the details of an item in the Illustrated Part Data (IPD)

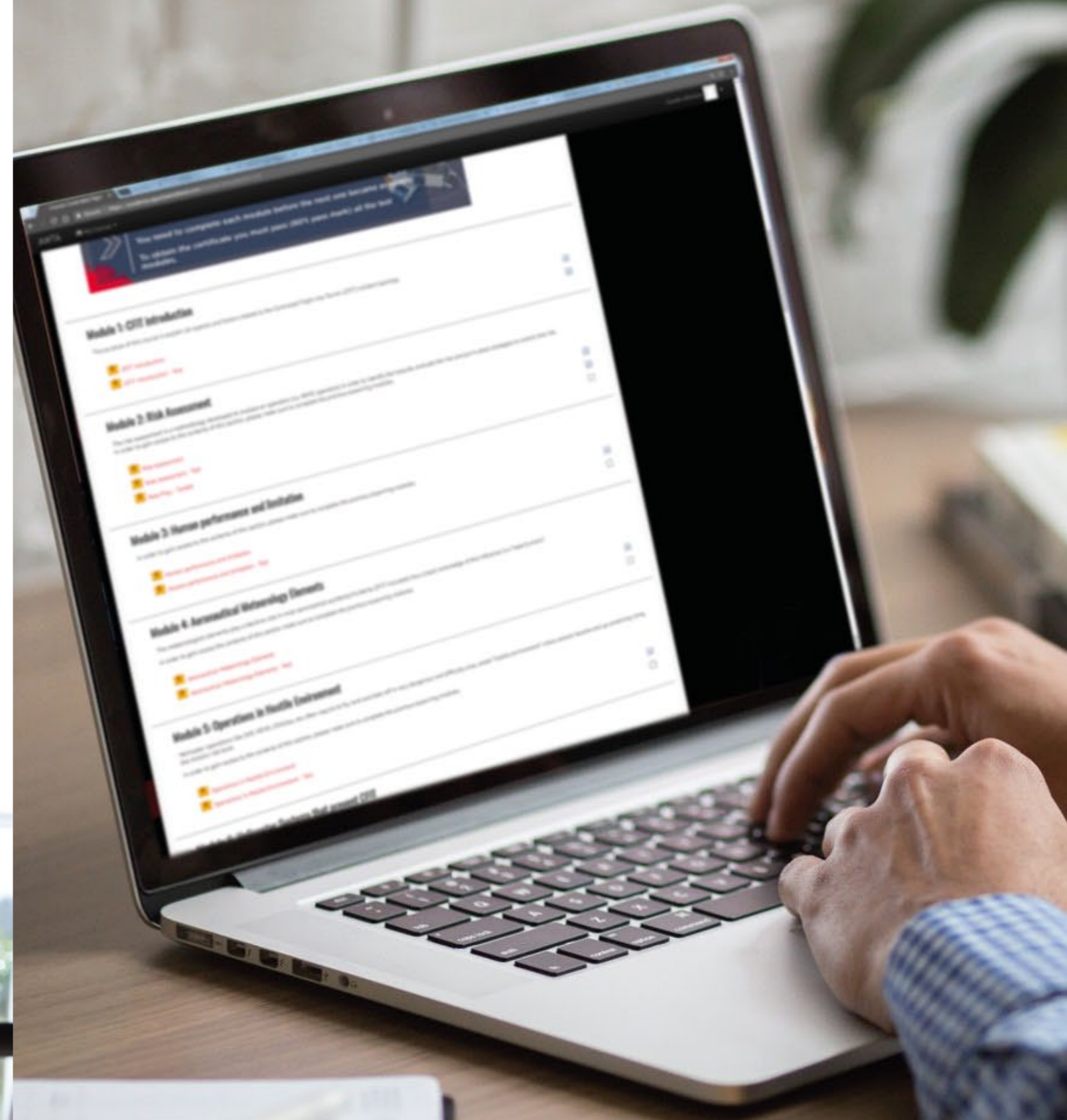
e-Learning Course Data

Target Population: Helicopters' aircrews, technicians and manager

Regulatory Requirement: Non-specific; could be beneficial for specific Training programs

Duration: 4 hours

Progress/ Final Test: None



AW TRAINING

